

REMARKS

Claims 1-9 are pending in the above identified application. Claim 1 has been amended by way of the present amendment. Reconsideration is respectfully requested.

In the outstanding Office Action, claims 1-9 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Publication No. 2003/0198155 (Go et al.). Reconsideration is respectfully requested.

35 U.S.C. § 102 Claim Rejections

Claims 1-9 were rejected under 35 U.S.C. § 102(e) as being anticipated by Go et al. Reconsideration is respectfully requested.

Claim 1 has been amended to further clarify the invention. In particular, claim 1 has been amended to recite:

detecting at least one unstable signal source of the optical
disk drive and generating a detected value.

Support for the amendment is provided at least at page 3, paragraph [0008], lines 9-10; and page 8, paragraph [0015], lines 5-6 of the specification. Therefore, it is respectfully submitted that the amended claims raises no questions of new matter.

In addition, the Final Rejection includes rejections based on anticipation. “Anticipation under 35 USC §102(e) requires that ‘each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.’” *In re Robertson*, 49 USPQ 1949, 1950 (Fed.Cir. 1999).

“All words in the claim must be considered in judging the patentability of the claim against the prior art.” *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970). As set forth in section 2111 of the MPEP, “claims are interpreted in the broadest reasonable fashion *consistent with the specification*” (emphasis added). The Patent and Trademark Office *is required to take into account whatever*

enlightenment is afforded by the specification, In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ 2d 1023, 1027-28 (Fed. Cir. 1997) (emphasis added).

Further, Applicants note that anticipation requires the disclosure, in a prior art reference, of each and every limitation as set forth in the claims.¹ *There must be no difference between the claimed invention and reference disclosure* for an anticipation rejection under 35 U.S.C. §102 (emphasis added).² To properly anticipate a claim, the reference must teach every element of the claim.³ “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference”.⁴ “The identical invention must be shown in as complete detail as is contained in the ...claim.”⁵ In determining anticipation, *no claim limitation may be ignored* (emphasis added)⁶

Applicants respectfully submit the applied art of Go et al. does not meet the above-discussed threshold for an anticipation rejection. In particular, though the outstanding Office Action asserts that Go et al. discloses all the claimed limitations, Applicants respectfully submit that Go et al. does *not* disclose *each and every limitation of the claim* and in particular, Go et al. does not disclose, as claim 1 recites:

the unstable signal source is selected from a group
including *a level of a focusing error signal*,
a level of a tracking error signal and
a frequency of buffer under-run occurrence (emphasis
added).

Thus, there are differences between the claimed invention and the reference disclosures of Go et al. and therefore, it is respectfully requested that the outstanding rejections be withdrawn since Go et al. does not disclose, anticipate or inherently teach each limitation of the claimed invention.

¹ *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985).

² *Scripps Clinic and Research Foundation v. Genentech, Inc.*, 18 USPQ2d 1001 (Fed. Cir. 1991).

³ See MPEP § 2131.

⁴ *Verdegaal Bros. v. Union Oil Co. of Calif.*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

⁵ *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

⁶ *Pac-Tex, Inc. v. Amerace Corp.*, 14 USPQ2d 187 (Fed. Cir. 1990).

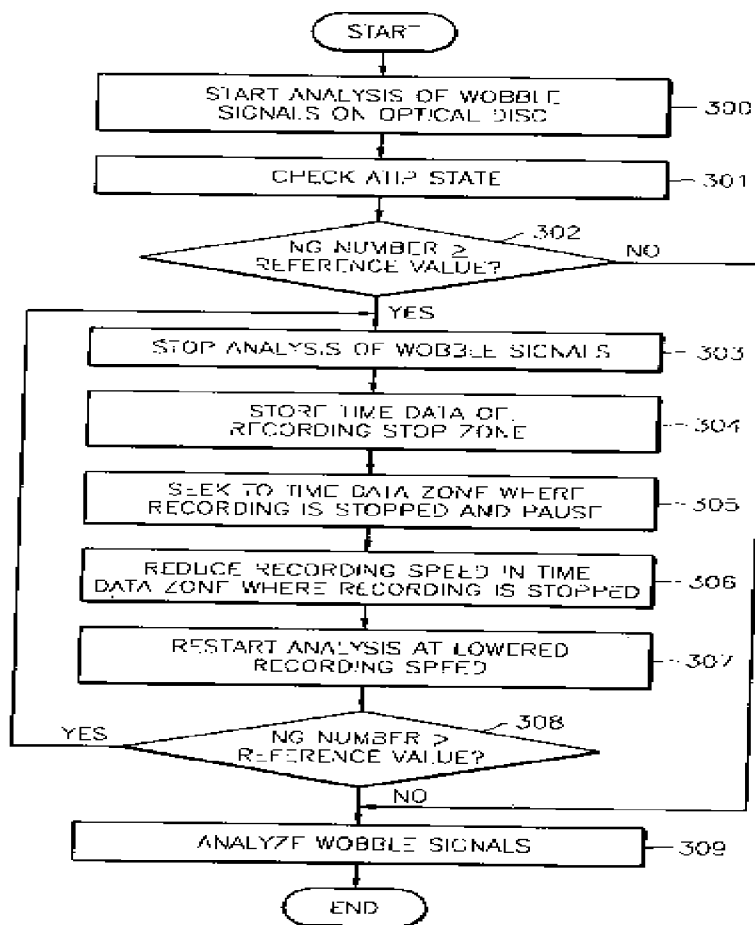
Go et al. discloses an apparatus for changing a recording speed of an optical recording medium by *analyzing wobble signals in real time during a recording operation*. (emphasis added).⁷ In particular, Go et al. discloses a control unit **104** includes a state detection unit **104-1**, a comparison unit **104-2**, a memory **104-3**, a recording start/stop control unit **104-4**, and a recording speed control unit **104-5**.⁸ Further, Go et al., as shown in the flowchart of **FIG. 3** below, discloses: a method of changing a recording speed of an optical recording medium that comprises: *starting an analysis of wobble signals on the optical disc in operation 300*, checking an absolute time in a pregroove (ATIP) state in operation **301**; determining whether a no good (NG) number is equal to or greater than a reference value in operation **302**; stopping *the analysis of the wobble signals in operation 303*; storing time data of a recording stop zone in operation **304**; seeking the recording stop zone and pausing in operation **305**; lowering the recording speed in the recording stop zone in operation **306**; and *restarting the analysis of the wobble signals at the lowered recording speed in operation 307*; determining whether the NG number is equal to or greater than the reference value in operation **308**; and continuously analyzing the wobble signals in operation **309** (emphasis added).⁹

As discussed above and as shown in **FIG. 3**, the method of changing a recording speed of an optical recording medium, of Go et al. *is determined by analyzing wobble signals* (emphasis added)

⁷ Go et al. At ABSTRACT.

⁸ *Id.* at **FIG. 2**; and paragraph [0034].

⁹ *Id.* at **FIG. 3**; and paragraph [0035].

FIG. 3

Further, the background art section of Go et al. discloses: "the recording speed is determined by measuring a tracking error quality and a focus error quality of a blank disc *before a recording operation*" [e.g., see [0012]] (emphasis added).¹⁰ Thus, in contrast to the claimed invention, Go et al. discloses the tracking error signal and the focus error signal are *not* used for determining whether the recording speed should be changed, "during recording," as recited in the claimed invention. Instead, as discussed above, Go et al. discloses using the wobble signal that for this purpose "during recording," as recited in the amended claims. However, as indicated below, references to the "wobble signal" in the claimed invention were removed by the previous

amendment to the claims. Therefore, Go et al. does not disclose this limitation of the claimed invention and actually teaches away from the claimed invention.

Claim 1 was previously amended to clarify the invention. In particular, claim 1 was amended to recite:

wherein the unstable signal source is selected from ~~a the~~ group including a level of a focusing error signal, a level of a tracking error signal, ~~a wobble synchronization pattern loss, an error rate of demodulating a wobble signal and~~ a frequency of buffer under-run occurrence during recording;
ceasing recording if the detected value exceeds a preset threshold value;
decreasing ~~a the~~ rotation speed of the optical disk drive; and
resuming recording with the decreased rotation speed
(emphasis added).

That is, references to detecting an “unstable signal” that is related to a “wobble signal” were canceled from the claims. Independent claim 5 was similarly amended. Specifically, the claimed invention is directed toward detecting an “unstable signal source” selected from a group including: (1) “a level of a focusing error signal”; (2) “a level of a tracking error signal” and (3) “a frequency of buffer under-run occurrence during recording,” as recited in independent claim 1, and in similar terms in independent claim 5. However, it is respectfully submitted that Go et al. does not disclose detecting at least one of the above-referenced unstable signal sources along with the limitation “during recording,” as will be discussed below.

With respect to limitation (1): “a level of a focusing error signal,” the omission of any reference to Go et al. in the outstanding Office Action at page 5, paragraph 3 is a clear indication that that this particular limitation is not disclosed by Go et al., “during recording.”

Regarding limitation (2): “a level of a tracking error signal,” the outstanding Office Action suggest that **Fig. 2** and paragraphs **[0020]**, **[0024]**, **[0042]** and **[0012]** of the Go et al. disclose this limitation. However, as discussed above, the reference to using a tracking error

¹⁰ *Id.* at paragraph **[0012]**.

signal in Go et al. occurs “before a recording operation” and *not* “during recording, as recited in the claimed invention.

Even considering the counter argument of the outstanding Office Action suggesting use of the disclosure of paragraph [0016] does not overcome the deficiencies of Go et al. In particular, paragraph [0016] of Go et al. discloses: “continuously *checking wobble signals* during the recording operation” (emphasis added). However, as discussed above, use of the “wobble signals” has been canceled from the claims so that this disclosure does not read on the claimed invention.

With respect to limitation (3): “a frequency of buffer under-run occurrence during recording,” though Go et al. at paragraph [0052] discloses: “buffer under run and defects of read-in start position and seek fail, which are generated during a ZCLV operation, are prevented,” it is respectfully submitted that Go et al. nowhere disclose detecting “a buffer under-run occurrence during recording,” as recited in the claimed invention. In fact, since Go et al. discloses that such buffer under-run occurrences are “prevented,” and it is respectfully submitted that this reference actually is not recited in the claimed invention.

Furthermore, as to Claim 2, the outstanding Office Action indicates that the feature is “inherently” disclosed in **FIG. 3** and paragraph [0035] of Go et al. However, it is respectfully submitted that Go et al. does not disclose the limitations of Claim 2. That is, in accordance with the claimed invention, the step of checking whether the optical disc drive is recording is preferably performed first because the levels of the tracking error signal and the focus error signal are measured “during recording,” as recited in claim 1, upon which claim 2 ultimately depends.

In contrast to claim 2, as disclosed in paragraph [0012] of Go et al., discloses that the tracking error quality and focus error quality are measured *before a recording operation*. Thus, it is not necessary for Go et al. to check whether the optical disk drive is recording before detection of the tracking error signal or the focusing error signal. In fact, it is respectfully submitted that based on the above-discussion, Go et al. teaches away from the claimed invention.

Therefore, it is respectfully submitted, the suggestion in the outstanding Office Action that the disclosure of claim 2 is inherent to Go et al. is incorrect.

Moreover, amended claim 5 specifies a servo signal generation unit for generating a level of a focusing error signal, and a level of a tracking error signal during recording. As mentioned in the above-discussed argument for claim 1, Go et al. discloses the tracking error quality and the focus error quality of a blank disc are measured *before a recording operation*. Thus, Go et al. nowhere discloses the limitations of claim 5.

Thus, in consideration of the discussion above, it is respectfully submitted that Go et al. does *not* disclose the limitation of: “detecting at least one unstable signal source of the optical drive, wherein the unstable signal source is selected from a group including a level of a focusing error signal, a level of a tracking error signal and a frequency of buffer under-run occurrence during recording,” as recited in independent claim 1. Similar limitations are also recited by independent claim 5. Thus, Go et al. does not disclose each and every limitation of the claimed invention and does not meet the threshold of anticipation for a 102 rejection. Therefore, it is respectfully submitted that Go et al. does not disclose, anticipate or inherently teach the claimed invention and that independent claims 1 and 5, and claims dependent thereon, patentably distinguish thereover and it is respectfully requested that the outstanding rejection be withdrawn.

Conclusion

In view of the above, consideration and allowance are respectfully solicited.

In the event the Examiner believes an interview might serve in any way to advance the prosecution of this application, the undersigned is available at the telephone number noted below.

The Office is authorized to charge any necessary fees to Deposit Account No. 22-0185.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 22171-00026-US1 from which the undersigned is authorized to draw.

Dated: January 11, 2008

Respectfully submitted,

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